(1) a conserved C-terminal seven-cysteine skeleton 60% identical to residues 38-139 of SEQ ID NO: 5;

(2) a conserved C-terminal seven-cysteine skeleton 70% homologous to residues 38-139 of SEQ ID NO: 5;

K1 (3) an amino acid sequence of human OP-1, mouse OP-1, human OP-2, mouse OP-2, 60A, GDF-1, BMP2A, BMP2B, DPP, Vg1, Vgr-1, BMP3, BMP5, or BMP6,

(4) a sequence defined by Generic Sequence 6, SEQ ID NO: 31; or,

(5) a sequence defined by OPX, SEQ ID NO: 29;

wherein the morphogen stimulates the production of an N-CAM or L1 isoform in said neuronal cell.

99. (**Amended**) ~~A method for decreasing~~ neuronal cell death associated with a chemical or physical injury, comprising contacting said neuronal cell with a morphogen comprising a dimeric protein with:

(1) a conserved C-terminal seven-cysteine skeleton 60% identical to residues 38-139 of SEQ ID NO: 5;

K2 (2) a conserved C-terminal seven-cysteine skeleton 70% homologous to residues 38-139 of SEQ ID NO: 5;

(3) an amino acid sequence of human OP-1, mouse OP-1, human OP-2, mouse OP-2, 60A, GDF-1, BMP2A, BMP2B, DPP, Vg1, Vgr-1, BMP3, BMP5, or BMP6,

(4) a sequence defined by Generic Sequence 6, SEQ ID NO: 31; or,

(5) a sequence defined by OPX, SEQ ID NO: 29;

wherein the morphogen stimulates the production of an N-CAM or L1 isoform in said neuronal cell.

105. (**Reiterated**) The method of claim 97 or 99, wherein the morphogen is human OP-1.

106. (**Reiterated**) The method of claim 97 or 99, wherein the morphogen is mouse OP-1.

107. (**Reiterated**) The method of claim 97 or 99, wherein the morphogen is human OP-1, mouse OP-1, human OP-2, mouse OP-2, 60A, BMP2A, BMP2B, Vg1, Vgr-1, BMP5, or BMP6.

108. (**Reiterated**) The method of claim 97 or 99, wherein the morphogen is human OP-1, mouse OP-1, human OP-2, mouse OP-2, BMP5, or BMP6.

The claims presented above incorporate changes as indicated by the marked-up versions below.

97. (**Amended**) A method for decreasing neuronal cell death associated with a neuropathy, comprising contacting said neuronal cell with a morphogen comprising a dimeric protein with:

(1) a conserved C-terminal seven-cysteine skeleton 60% identical to residues 38-139 of SEQ ID NO: 5;

(2) a conserved C-terminal seven-cysteine skeleton 70% homologous to residues 38-139 of SEQ ID NO: 5;

(3) an amino acid sequence of ~~selected from the group consisting of~~ human OP-1, mouse OP-1, human OP-2, mouse OP-2, 60A, GDF-1, BMP2A, BMP2B, DPP, Vg1, Vgr-1, BMP3, BMP5, ~~and~~ or BMP6,

(4) a sequence defined by Generic Sequence 6, SEQ ID NO: 31; or,

(5) a sequence defined by OPX, SEQ ID NO: 29;

wherein the morphogen stimulates the production of an N-CAM or L1 isoform in said neuronal cell.

99. (**Amended**) A method for decreasing neuronal cell death associated with a chemical or physical injury, comprising contacting said neuronal cell with a morphogen comprising a dimeric protein with:

(1) a conserved C-terminal seven-cysteine skeleton 60% identical to residues 38-139 of SEQ ID NO: 5;

(2) a conserved C-terminal seven-cysteine skeleton 70% homologous to residues 38-139 of SEQ ID NO: 5;

(3) an amino acid sequence of ~~selected from the group consisting of~~ human OP-1, mouse OP-1, human OP-2, mouse OP-2, 60A, GDF-1, BMP2A, BMP2B, DPP, Vg1, Vgr-1, BMP3, BMP5, ~~and~~ or BMP6,

(4) a sequence defined by Generic Sequence 6, SEQ ID NO: 31; or,

(5) a sequence defined by OPX, SEQ ID NO: 29;

wherein the morphogen stimulates the production of an N-CAM or L1 isoform in said neuronal cell.